



**WEEKLY SOIL MOISTURE LOSS IN INCHES**

(Estimated Crop Evapotranspiration or ET<sub>c</sub>)

09/27/19 through 10/03/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	9/27- 10/3 Water Use	Accum'd Seasonal Water Use	10/4- 10/10 Estimated ETc		9/27- 10/3 Water Use	Accum'd Seasonal Water Use	10/4- 10/10 Estimated ETc		9/27- 10/3 Water Use	Accum'd Seasonal Water Use	10/4- 10/10 Estimated ETc
Almonds (3/10) *	1.05	40.98	0.95		1.14	44.11	0.91		0.97	41.27	0.90
Pistachio (4/19) * **	0.98	34.70	0.88		1.07	37.30	0.85		0.91	34.92	0.85
Citrus (2/1)	0.70	30.85	0.67		0.76	33.30	0.63		0.66	30.98	0.62
Raisin Grapes (3/16 ) (11 ft. row spacing)	0.89	29.48	0.81		0.93	31.56	0.77		0.83	29.59	0.76
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	0.96	32.46	0.88		1.05	35.03	0.84		0.90	32.70	0.83
Walnuts (4/15)	1.05	33.50	1.10		1.14	36.13	0.91		0.98	33.64	0.90
Stone Fruit (3/20 )	1.15	33.82	1.19		1.26	36.45	0.98		1.06	33.88	0.97
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)	11.15				7.89				10.81		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

\* Estimates are for orchard floor conditions where vegetation is managed by some combination of strip applications of herbicides, frequent mowing or tillage, and by mid and late season shading and water stress. Weekly estimates of soil moisture loss can be as much as 25 percent higher in orchards where cover crops are planted and managed more intensively for maximum growth.

\*\* Very vigorous, non-salt affected peak season pistachio Kc can be as high as 1.19 – resulting in about 8% greater water use than shown in these tables.

\*\*\* CIMIS station #188 Madera II has been taken out of service due to a conversion of the pasture to permanent crops. For the remainder of 2018 irrigation season Historical Average ET<sub>o</sub> will be used for the weekly report.

**PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>**

Crops	#148 Merced					#39 Parlier					#258 Lemon Cove			
	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
System Efficiency >>														
Almonds (3/10)	1.6	1.4	1.2	1.1		1.8	1.5	1.3	1.2		1.5	1.3	1.1	1.0
Pistachio (4/19)	1.5	1.3	1.2	1.0		1.6	1.4	1.3	1.1		1.4	1.2	1.1	1.0
Citrus (2/1)	1.1	0.9	0.8	0.7		1.2	1.0	0.9	0.8		1.0	0.9	0.8	0.7
Raisin Grapes (3/16 ) (11 ft. row spacing)	1.4	1.2	1.0	0.9		1.4	1.2	1.1	1.0		1.3	1.1	1.0	0.9
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.5	1.3	1.1	1.0		1.6	1.4	1.2	1.1		1.4	1.2	1.1	0.9
Walnuts (4/15)	1.6	1.4	1.2	1.1		1.8	1.5	1.3	1.2		1.5	1.3	1.2	1.0
Stone Fruit (3/20 )	1.8	1.5	1.4	1.2		1.9	1.7	1.5	1.3		1.6	1.4	1.2	1.1

<sup>1</sup> The amount of water required by a specific irrigation system to satisfy evapotranspiration. Typical ranges in irrigation system efficiency are: Drip, 80%-95%; Micro-sprinkler, 80%-90%; Sprinkler, 70%-85%; and Border-furrow, 50%-75%.

**PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE**

Crops	#148 Merced					#39 Parlier					#258 Lemon Cove			
Almonds 115 Trees/A	378	331	283	260		425	354	307	283		354	307	260	236
Pistachio 106 Trees/A	374	324	299	249		399	349	324	274		349	299	274	249
Citrus 110 Trees/A	272	222	197	173		296	247	222	197		247	222	197	173
Raisin Grapes 566 Vines/A	67	58	48	43		67	58	53	48		62	53	48	43
Winegrapes 622 Vines/A	65	57	48	44		70	61	52	48		61	52	48	39
Walnuts 76 Trees/A	572	500	429	393		643	536	464	429		536	464	429	357
Stonefruit 172 Trees/A	284	237	221	189		300	268	237	205		253	221	189	174

For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.



**WEEKLY SOIL MOISTURE LOSS IN INCHES**

(Estimated Crop Evapotranspiration or ET<sub>c</sub>)

09/27/19 through 10/03/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	9/27- 10/3 Water Use	Accum'd Seasonal Water Use	10/4- 10/10 Estimated ETc		9/27- 10/3 Water Use	Accum'd Seasonal Water Use	10/4- 10/10 Estimated ETc		9/27- 10/3 Water Use	Accum'd Seasonal Water Use	10/4- 10/10 Estimated ETc
Almonds (3/10) *	1.13	46.83	1.05		1.25	48.07	1.14		1.18	45.21	1.09
Pistachio (4/19) * **	1.06	39.71	0.98		1.18	40.28	1.08		1.11	37.90	1.02
Citrus (2/1)	0.75	35.10	0.72		0.83	36.56	0.80		0.77	34.06	0.76
Raisin Grapes (3/16 ) (11 ft. row spacing)	0.93	33.80	0.90		1.02	34.20	0.94		0.96	32.14	0.91
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.04	37.29	0.98		1.16	38.03	1.08		1.09	35.65	1.02
Walnuts (4/15)	1.13	38.39	1.05		1.21	39.10	1.12		1.16	36.68	1.09
Stone Fruit (3/20 )	1.25	38.69	1.18		1.37	39.65	1.29		1.30	37.22	1.23
<b>Past 7 days precipitation (inches)</b>	0.00				0.00				0.00		
<b>Accumulated precipitation (inches) (1/1/2019)</b>	4.82				7.59				7.08		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

\* Estimates are for orchard floor conditions where vegetation is managed by some combination of strip applications of herbicides, frequent mowing or tillage, and by mid and late season shading and water stress. Weekly estimates of soil moisture loss can be as much as 25 percent higher in orchards where cover crops are planted and managed more intensively for maximum growth.

\*\* Very vigorous, non-salt affected peak season pistachio Kc can be as high as 1.19 – resulting in about 8% greater water use than shown in these tables.

**PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>**

Crops	#124 Panoche					#2 Five Points					#15 Stratford			
	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
System Efficiency >>	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
Almonds (3/10)	1.7	1.5	1.3	1.2		1.9	1.7	1.5	1.3		1.8	1.6	1.4	1.2
Pistachio (4/19)	1.6	1.4	1.2	1.1		1.8	1.6	1.4	1.2		1.7	1.5	1.3	1.2
Citrus (2/1)	1.2	1.0	0.9	0.8		1.3	1.1	1.0	0.9		1.2	1.0	0.9	0.8
Raisin Grapes (3/16 ) (11 ft. row spacing)	1.4	1.2	1.1	1.0		1.6	1.4	1.2	1.1		1.5	1.3	1.1	1.0
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.6	1.4	1.2	1.1		1.8	1.5	1.4	1.2		1.7	1.5	1.3	1.1
Walnuts (4/15)	1.7	1.5	1.3	1.2		1.9	1.6	1.4	1.3		1.8	1.5	1.4	1.2
Stone Fruit (3/20 )	1.9	1.7	1.5	1.3		2.1	1.8	1.6	1.4		2.0	1.7	1.5	1.4

<sup>1</sup> The amount of water required by a specific irrigation system to satisfy evapotranspiration. Typical ranges in irrigation system efficiency are: Drip, 80%-95%; Micro-sprinkler, 80%-90%; Sprinkler, 70%-85%; and Border-furrow, 50%-75%.

**PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE**

Crops	#124 Panoche					#2 Five Points					#15 Stratford			
	401	354	307	283		449	401	354	307		425	378	331	283
Almonds 115 Trees/A	401	354	307	283		449	401	354	307		425	378	331	283
Pistachio 106 Trees/A	399	349	299	274		448	399	349	299		424	374	324	299
Citrus 110 Trees/A	296	247	222	197		321	272	247	222		296	247	222	197
Raisin Grapes 566 Vines/A	67	58	53	48		77	67	58	53		72	62	53	48
Winegrapes 622 Vines/A	70	61	52	48		79	65	61	52		74	65	57	48
Walnuts 76 Trees/A	607	536	464	429		679	572	500	464		643	536	500	429
Stonefruit 172 Trees/A	300	268	237	205		332	284	253	221		316	268	237	221

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